



U.S. Department
of Transportation
**Federal Aviation
Administration**

Aviation Safety

800 Independence Ave
Washington, DC 20591

March 20, 2020

Exemption No. 18506
Regulatory Docket No. FAA-2020-0117

Chris M. Schenck
State Fire Program Leader
Wildlife Division, Fire Program
Texas Parks & Wildlife Department
8096 FM 2782
Nacogdoches, TX 75964

Dear Mr. Schenck:

This letter is to inform you of the Federal Aviation Administration (FAA) grant of your petition for exemption. It transmits the FAA decision, explains its basis, and gives you the conditions and limitations of the exemption, including the date it ends.

The Basis for The FAA Decision

By letter posted to the docket on January 22, 2020, you petitioned the FAA on behalf of Texas Parks and Wildlife Department, Wildlife Division (TPWD) for an exemption from §§ 107.36; 137.19(c), (d), (e)(2)(ii), (e)(2)(iii), (e)(2)(iv) and (e)(2)(v); 137.31(a) and (b); 137.33(a); 137.41(c); and 137.42 of Title 14, Code of Federal Regulations (14 CFR) to the extent necessary to allow TPWD to operate the DJI Matrice 600 Pro small unmanned aircraft system (UAS), with a maximum takeoff weight of 33.3 pounds (lbs.), for commercial agricultural-related services and aerial ignitions to manage burnable acres on all Department lands for land management activities.

The FAA has issued a grant of exemption in circumstances similar in all material respects to those presented in your petition. In Grant of Exemption No. 17261 (copy enclosed), the FAA found that a grant of such a petition for exemption for operating small UAS under 14 CFR part 137, is in the public interest. The FAA applied the analysis of Exemption No. 17261 to permit the use of the DJI Matrice 600 Pro, and any other small UAS for agricultural aircraft operations.

AFS-20-132364-E

Having reviewed your reasons for requesting an exemption, I find that—

- they are similar in all material respects to relief previously requested in the enclosed Grant of Exemption No. 17261;
- the reasons stated by the FAA for granting the enclosed Grant of Exemption No. 17261 also apply to the situation you present; and
- a grant of exemption is in the public interest.

The FAA Decision

The FAA has determined that good cause exists for not publishing a summary of the petition in the Federal Register because the requested exemption would not set a precedent, and any delay in acting on this petition would be detrimental to TPWD.

Although TPWD requested relief from § 137.19(e)(2)(iv), the FAA has previously determined that this task should not be exempted for agricultural operations. UAS are capable of demonstrating Swath operations, therefore relief from § 137.19(e)(2)(iv) is not necessary¹.

Under the authority contained in 49 U.S.C. 106(f), 40113, and 44701, which the FAA Administrator has delegated to me, I hereby grant Texas Parks and Wildlife Department an exemption from 14 CFR §§ 107.36; 137.19(c), (d), (e)(2)(ii), (e)(2)(iii), and (e)(2)(v); 137.31(a) and (b); 137.33(a); 137.41(c); and 137.42 to the extent necessary to allow the petitioner to operate small unmanned aircraft systems, that weigh less than 55 pounds on takeoff, to conduct agricultural aircraft operations. This exemption is subject to the conditions and limitations described below.

Conditions and Limitations

In this grant of exemption, Texas Parks and Wildlife Department is hereafter referred to as the operator.

Failure to comply with any of the conditions and limitations of this grant of exemption will be grounds for the immediate suspension or rescission of this exemption.

1. Operations authorized by this grant of exemption are limited to any small unmanned aircraft system (UAS) model with a maximum takeoff weight of less than 55 pounds, including everything that is on board or otherwise attached to the aircraft.

¹ Exemption No. 17643 enclosed.

2. Prior to operating any small UAS other than the UAS referenced in the exemption, the operator must notify the Flight Standards District Office (FSDO) that holds its agricultural aircraft operator certificate. Operations authorized by this exemption are limited to the small UAS listed on the operator's part 137 Letter of Authorization.
3. This exemption, and all documents needed to operate the small UAS and conduct its operations in accordance with the conditions and limitations stated in this grant of exemption, are hereafter referred to as the operating documents. The operating documents must be accessible during small UAS operations and made available to the Administrator upon request. If a discrepancy exists between the conditions and limitations in this exemption, any applicable FAA-issued waivers/authorizations, and the procedures outlined in the operating documents, the most restrictive conditions, limitations, provisions, or procedures apply and must be followed. The operator may update or revise its operating documents. It is the operator's responsibility to track such revisions and present updated and revised documents to the Administrator or any law enforcement official upon request. The operator must also present updated and revised documents upon requesting extension of, or amendment to, this grant of exemption. If the operator determines that any update or revision would affect the basis upon which the FAA granted this exemption, then the operator must petition for an amendment to its grant of exemption. If questions arise regarding updates or revisions to the operating documents, the operator may contact the Flight Standards Service General Aviation and Commercial Division (AFS-800), 55 M Street, SE, 8th Floor, Zone 1, Washington, DC 20003. Telephone number: 202-267-1100, Email: 9-AFS-800-Correspondence@faa.gov.
4. Any small UAS used by the operator that has undergone maintenance or alterations that affect the small UAS operation or flight characteristics of the aircraft (including replacement of a flight critical component, updates to software or firmware of or associated with the system, and any other change that could affect the operation), must undergo a functional test flight prior to conducting further operations under this exemption. Such functional test flights must be conducted in a manner consistent with how the small UAS will be operated under this exemption. Functional test flights may only be conducted by a remote pilot in command (PIC) with the assistance of a Visual Observer (VO) and other personnel necessary to conduct the test flight (such as a mechanic or technician). The test flight must be conducted in such a manner so as to not pose an undue hazard to persons and property. For purposes of this condition, "assistance of a Visual Observer" means the assistance described at § 107.33.
5. The operator must follow the small UAS manufacturer's maintenance, overhaul, replacement, inspection, and life-limit requirements for the aircraft and aircraft components. Each small UAS operated under this exemption must comply with all

updates to these documents that the manufacturer makes for the purposes of ensuring safety of operations in the small UAS.

6. *PIC qualifications.* The remote PIC must demonstrate to the FAA the ability to safely operate the small unmanned aircraft system in a manner consistent with how it will be operated under this exemption. This demonstration must include the applicable knowledge and skills requirements for agricultural aircraft operations outlined in Title 14, Code of Federal Regulations (14 CFR) part 137, evasive and emergency maneuvers, and maintaining appropriate distances from persons, vessels, vehicles and structures before operating non-training, proficiency, or experience-building flights under this exemption.
7. For small UAS aerial application operations, conducted under 14 CFR part 137 where Global Positioning System (GPS) signal is necessary to safely operate the small unmanned aircraft (UA), the remote PIC must immediately recover or land the small UA upon loss of GPS signal.
8. If the remote PIC loses command or control link with the small UA, the small UA must follow a pre-determined route to either reestablish link or immediately recover or land, which must be satisfactorily demonstrated as part of the knowledge and skill assessment that will occur in accordance with § 137.19(e).
9. The remote PIC must abort the flight operation if unexpected circumstances or emergencies arise that could potentially degrade the safety of persons or property. The remote PIC must terminate flight operations without causing undue hazard to persons or property in the air or on the ground. Documents the operator must retain under §§ 107.13, 137.33, and in accordance with this exemption (including operator's exemption, any waiver held, a copy of the agricultural aircraft operator certificate, training manual, operations manual, and registration certificate) must be available to the remote PIC at the Ground Control Station of the small UAS at all times during the operations to which this exemption applies. These documents must be made available to the Administrator or any law enforcement official upon request. Airworthiness certificates applicable to the small UAS to which this exemption applies are not required for compliance with this condition.
10. The relief granted from § 107.36 is limited to the use of any economic poison as defined in § 137.3.
11. The remote PIC may operate the small UAS from a moving device or vehicle as described in § 107.25, which permits such operation in sparsely populated areas, provided the small UAS do not transport property for compensation or hire. If conducting agricultural aircraft operations in accordance with § 107.25, the remote PIC

must satisfactorily demonstrate the applicable knowledge and skills requirements of § 137.19 in the type of device or vehicle to be used in agricultural aircraft operations.

12. This exemption is not valid for operations outside the United States.

This exemption does not obviate the applicability of, or in any manner alter the provisions of parts 107 and 137 that are not the subject of this exemption. In this regard, the petitioner must adhere to the terms of any waiver the FAA has issued to the petitioner under part 107, subpart D that is associated with the agricultural operations that are the subject of this exemption. In addition, the petitioner must comply with all limitations and provisions of the petitioner's agricultural aircraft operator certificate, which the petitioner must obtain prior to conducting agricultural operations in accordance with § 137.11. If you request an extension to this exemption, please submit your request by using the Regulatory Docket FAA-2020-0117 (<http://www.regulations.gov>). In addition, you should submit your request no later than 120 days prior to the exemption's expiration date listed below.

If you require an amendment to this exemption, please submit your request no later than 120 days prior to the date you need the amendment using the process described above.

Any extension or amendment request must meet the requirements of § 11.81 of 14 CFR.

The Effect of the FAA's Decision

This exemption terminates on March 31, 2022, unless sooner superseded or rescinded.

Sincerely,

/s/

Robert C. Carty
Deputy Executive Director, Flight Standards Service

Enclosure

AFS-20-132364-E